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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/272,190	03/18/1999	JACK H. WILSON SR.	PA-92	5336

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MEREK AND VOORHEES
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ALEXANDRIA, VA 22314

EXAMINER

MARKOVICH, KRISTINE M

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 08/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/272,190

Applicant(s)

WILSON, JACK H.

Examiner

Kristine M. Markovich

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-- Th MAILING DATE of this communication appears on the cov r sh t with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Claim Rejections - 35 U.S.C. § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 20-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over “*Overlays on Deck*” (Civil Engineering Magazine, September 1992, pages 42-45; article written by Paul Tarricone) in view of Marcato (US Patent 5,542,962).

“*Overlays on Deck*” discloses a method of resurfacing a road by applying a first layer of wet polymer modified concrete (PMC) over a layer of pavement using a squeegee to spread the PMC having a thickness substantially less than that of the layer of pavement. “*Overlays on Deck*” also discloses applying a first layer of rock chips over the first PMC layer while the first layer is wet (page 45, 2nd column, fourth full paragraph).

“*Overlays on Deck*” discloses the claimed device except for using an air blower to propel the aggregate to adhere to the PMC surfacing material. Marcato discloses that it is known in the art to provide an air pressured blower in order to more firmly adhere aggregate into a liquid binder (column 6, line 63 to column 7, line 9). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the application of “*Overlays on Deck*” with the air blower of Marcato, in order to more firmly adhere aggregate into the liquid binder.

Regarding the limitation that the screeding is performed “in a single pass”, it would have been obvious to one having ordinary skill in the art at the time the invention was made to screed the surface in a single pass since it was known in the art that in surfacing road, a significant time

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constraint exists and performing application of the surfacing material should be done as efficiently as possible.

Regarding claims 21 and 25, "*Overlays on Deck*" also discloses applying a second layer of PMC over the first layer of rock chips and applying a second layer of rock chips over the second layer of PMC, thus creating a "multiple-layer overlay" (page 45, 2nd column, fourth full paragraph).

Regarding claims 22 and 24, "*Overlays on Deck*" discloses that a total thickness of the overlay can be as thin as 1/4 of an inch. Therefore, each layer of PMC applied would be as thin as 1/8 of an inch (page 43, 1st column, second full paragraph)..

Regarding claim 23, "*Overlays on Deck*" also discloses removing the excess rock chips after application of the PMC, rock chips, and allowing them time to cure (page 45, 2nd column, fourth full paragraph).

Regarding claim 26, "*Overlays on Deck*" discloses the step of initially filling potholes and performing a screeding operation in order to level the road surface prior to application of the PMC overlay (page 45, 2nd column, second full paragraph).

Regarding claim 27, specifically detailing the size of the rock chips, examiner takes Official Notice that it is well known in the art that rock chips smaller than a quarter of an inch are commonly used for sealing roadways.

Regarding claim 28, "*Overlays on Deck*" specifically states that the initial layer of PMC and aggregate is allowed to cure before being repeated to provide a multiple layer (page 45, 2nd column, fourth full paragraph).

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3. Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over "*Overlays on Deck*" in view of Barton (US Patent 3,775,018).

"*Overlays on Deck*" discloses a method of resurfacing a road by applying a first layer of wet polymer modified concrete (PMC) over a layer of pavement using a squeegee to spread the PMC having a thickness substantially less than that of the layer of pavement. "*Overlays on Deck*" also discloses applying or "broadcasting" a first layer of rock chips over the first PMC layer while the first layer is wet (page 45, 2nd column, fourth full paragraph).

"*Overlays on Deck*" discloses the claimed device except for anti-ponding lines. Barton discloses that it is known in the art to provide anti-ponding lines (column 1, lines 31-46) perpendicular to travel in order to promote drainage and increase the frictional properties of the road surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the pavement of "*Overlays on Deck*" with the anti-ponding lines of Barton, in order to promote drainage and increase the frictional properties of the road surface. Regarding the specific distance between anti-ponding lines, examiner takes Official Notice that it is old and well known in the art to apply anti-ponding lines at varying distances based on location of the roadway, general climate conditions, etc.

4. Claims 32, 33, 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over "*Overlays on Deck*" in view of Jones (US Patent 5,700,385).

"*Overlays on Deck*" discloses a method of resurfacing a road by applying a first layer of wet polymer modified concrete (PMC) over a layer of pavement. "*Overlays on Deck*" also discloses applying a first layer of rock chips over the first PMC layer while the first layer is wet. "*Overlays on Deck*" also discloses applying a second layer of PMC over the first layer of PMC

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and rock chips and applying a second layer of rock chips over the second layer of PMC, thus creating a "multiple-layer overlay" (page 45, 2nd column, fourth full paragraph).

"Overlays on Deck" discloses the claimed device except for electrical heating elements. Jones discloses that it is known in the art to provide electrical heating elements (column 1, lines 14-26) in order to prevent the accumulation of snow and ice on driving surfaces. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the concrete structure of *"Overlays on Deck"* with the electrical heating elements of Jones, in order to prevent the accumulation of snow and ice on driving surfaces.

Regarding claims 34, 35, and 37, it would have been an obvious extension of the teachings of *"Overlays on Deck"* to apply the first layer of concrete to cover the wheel lanes of the road surface in order to reinforce the area of the road that receives the most wear from traffic.

Regarding claims 38 and 39, it would have been obvious to one having ordinary skill in the art at the time the invention was made to connect an electrical heating element to a power source such as a battery or photovoltaic energy source in order to provide power to the element and maintain the elements in working condition.

5. Claim 34 and 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over *"Overlays on Deck"* in view of Jones as applied to claim 32 above, and further in view of Gemmer (US Patent 4,941,770).

The combination of paragraph 4 above discloses the claimed device except for copper wires in the heating elements. Gemmer discloses that it is known in the art to provide copper wires in heating elements (column 2, line 58 to column 3, line 30). It would have been obvious to

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one having ordinary skill in the art at the time the invention was made to provide the resurfacing method of the combination of paragraph 4 above with the copper wires of Gemmer, in order to reduce hazardous road surface conditions.

Response to Arguments

6. Applicant's arguments with respect to all claims have been considered but are moot in view of the new grounds of rejection.

Rejection using the reference "Concrete Solutions" has been withdrawn by examiner. Newly incorporated references have been used in this rejection, thereby making this action "Non-final". Arguments made to the use of the "Cobb", "Wilson, Sr." and "Reed et al." references are also consider moot since they are no long part of this rejection. In response to the argument made by applicant to the "Barton" and "Jones" references which states that they apply to "new" road construction and are therefore not applicable, examiner disagrees. These references are used to demonstrate the teaching that such heating devices are commonly placed in road structures and their use is to decrease the possible build up of ice and snow, etc. Examiner contends that it would have been obvious at the time the invention was made that one skilled in the art, provided with these teachings, would incorporate them into any road surface if desired. Additionally, it is a matter of common sense that these heating elements would be placed in the wheel lanes such that it is this would be the area needed to be free of ice and snow.

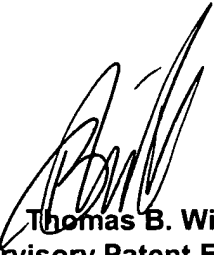
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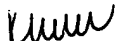
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristine M. Markovich whose telephone number is (703) 305-1676. The examiner can normally be reached on Mon-Fri from 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (703) 308-3870. The fax phone number for this Group is (703)305-3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-1113.


Thomas B. Will
Supervisory Patent Examiner
Group 3600


KMM
August 26, 2002